Det Bel Isle & Windsor Ferry Co 67

THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. IX NO. 35. CLEVELAND, O., SEPTEMBER 1, 1887. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

Steamer Maurice B. Grover has made thirteen trips in three months and two days.

Survey will be held on the Whitney this afternoon, Captain Benham for the ore and Wm. Miller for the vessel.

It is thought that the steamer J. C. Gilchrist will be launched at Craig & Son's yard on the 10th inst.

The steamer Aurora was towed to Toledo to take on a cargo of grain for Buffalo, where she will get her boilers at M. Riter's Eagle boiler works.

The annual meeting of the Cleveland Shipbuilding Co. will be held in the office of the company, corner Detroit and Center streets, on next Monday at 10 o'clock.

The steamer Cambria is working out an engagement of twenty trips, and her last arrival at Ashtabula was the completion of the fourteenth since the 7th of last June.

The D. C. Whitney arrived yesterday morning and went to the N. Y., P. & O. dock to discharge her ore, after which she will go into Cleveland drydock for a thorough overhauling.

L. P. and J. A. Smith, owners of the tug Patrick Henry, which foundered and sunk in Lake Erie, off Vermillion, O., a short time ago, intend raising her if possible this season.

Another crib for the new breakwater was anchored Saturday, making seven now placed. Messrs. J. A. & L. P. Smith, who are building the structure, expect to anchor five more cribs before the close of the season.

The propeller Cambria, carrying 2,377 tons of ore, made the last trip from Escanaba to Ashtabula and return in four days and twelve hours. She was unloaded at Ashtabula in eleven hours, and spent but fifteen hours there altogether.

The new steamship Sitka is at this port for the first time, and is a vessel of which her builder and owner may well be proud. In appearance she is the peer of anything on the lakes, and a creditable addition to Captain Wilson's fine fleet of new steamers.

On another page will be found an advertisement in which Mr. Henry W. Watson offers for sale the fleet belonging to the estate of the late Samuel L. Watson. The vessels all class straight A2 except the S. L. Watson, which rates A2½.

It is reported from Marquette that the mines at Tower, Vermillion range, are stocking ore, owing to the lack of vessels to handle their product. The pockets and all the cars available are filled with ore constantly, the supply of vessels never equaling the demand.

Captain James Corrigan has decided to contest the fine of $500, levied by the supervising inspector at Buffalo on the propeller Australasia carrying passengers. He has retained H. D. Goulder, Esq., and if the matter goes into court it will be closely watched by vessel owners as a test case.

The work of removing the bar at the mouth of the river, which has given vessels so much trouble for several weeks, is begun, and will be continued until the channel is clear. The complaint was made that the government had no money in the fund to prosecute the work, and now the city has taken the job in hand.

The steamer Bessemer, Captain Chamberlain, and schooner Guiding Star, Captain Cole, have finished their contract for ten cargoes, ore Escanaba to Ohio ports, and the owners, L. M. & L. S. Trans. Co., have chartered them for coal, Cleveland to Chicago at at $1.15, and ore back, Escanaba to Ohio ports, at $1.60, a good round trip freight. Both vessels have been having good dispatch.

Mr. Ira Bassett, of the firm of Bassett & Presley, iron merchants, is enjoying a two weeks trip to Massachusetts and the seashore. This firm has done a very prosperous business since they succeeded the firm of W. H. McCurdy & Co. We neglected to mention that they furnished the steel arches, plates, iron, spike, etc., for the new steamer Aurora, launched last week.

At a meeting of the Vessel Owners' Association, held in the office of Mr. M. A. Bradley yesterday, wages were advanced as follows: For cooks on steamers and sail vessels, and seamen on sail vessels, an addition of $5 was made to the wages recently paid. For firemen, wheelmen, and watchmen, an advance of $7.50 was made to their monthly wages. This increased pay is understood to go into effect September 1.

Again the lakes show, in the weekly report of the commissioner of navigation more tonnage than that of the coasts, gulf and rivers combined. This showing includes four large freight steamers, the Bulgaria, Cleveland, 1486 35 net tons; the Iron King, Detroit, 1223.44 net tons; the R. P. Fitzgerald, Milwaukee, 1175.57 net tons, and the Elfin-Mere, Port Huron, 796.05 net tons.

Captain George P. McKay, who has been watching the steamer Cambria, thinks she is good enough for him, and will go the round trip to enjoy a quick ride. It is possible that he will endeavor to drive Captain Cummings off and take command so that he may know what it is to be master of a fast steamer, as he retired from the lakes before they came into vogue, if we except the old passenger steamers between here and Buffalo in the good old days. We warn Captain Cummings to look out for him.

Since last report the steamer Chenango went into the Cleveland Drydock Co.'s dock for slight repairs to bottom; the steamer Henry Chisholm to have bottom recalked; the Forest City Ice Co.'s barge A. Walton to to have butts calked and slight repairs; the steamer George T. Hope was in to have bottom recalked; the schooner Wm. Shupe to have topsides calked; the company put foremast, mainmast, and main-topmast in the schooner Barker; also, making a new spar for the schooner Republic; propeller James Pickands was in drydock for a new wheel; schooner David Stewart some calking.

Freights are steady. The schooner E. H. Rutherford loads coal for St. Catherines at at $1.10, and schooner J. G. Masten is reported as loading coal and railroad iron for Duluth, the latter at $2.25 per ton. The schooner Republic takes coal to West Superior on owner's account. The schooners Montana, and E. P. Beals take wheat from Sandusky to Buffalo at 2¾ cents. Schooner Theodore Voges has been chartered to carry block stone from Kelley's Island to the Sault at $2 per ton. Propeller Bessemer coal, Cleveland to Chicago $1.15, and ore back Escanaba to Ohio ports $1.60; Samuel Mather, ore Ashland to Ohio ports at $2,40.

Meteorological summary for the week ending August 31:

Mean barometer	30.17
Mean temperature	61.6
Mean humidity	59.7
Total precipitation, inch	.07
Prevailing direction of wind	E.
Total wind movement	1088
Av. cloudiness	2.7
Av. state of weather	Clear.
Max. temperature, highest	78.0
Min temperature, lowest	46.5

WILLIAM LINE, Sergt. Signal Corps, U. S. A

CHICAGO.

Special to the Marine Record

At Miller Bros.' drydocks the schooner Addie was in for leak stopping; the tugs E. P. Ferry and J. V. Taylor to have leaks stopped; the steambarge Daisy Day for an end on shaft and new shoe, new rudder pintle, chocks and calking; the tug Thomas Hood to stop a leak; the steambarge City of New York for inspection by the United States inspector; schooners Racine and Mary Collins to stop leaks; the schooner Red White and Blue for some new plank in bottom, piece of new keel and calking; the schooner Annie Thorne and steambarge J. H. Pauley to stop leaks; tug Crawford for repairs to machinery; the sloop yacht Minnie M. to have bottom painted; the barge Advance received a new mainmast; the steambarge H. S. Hubbel was in for bottom calking.

Hugh Kelly, one of the best known stevedore bosses on the lakes, and well known to every vesselman who visits Chicago, furnishes an interesting report of the work performed by the Iowa elevator last Thursday, and says it knocks the bottom out of all previous records. Se en vessels went under the spouts between 7 o'clock in the morning and 6 o'clock in the evening, and took on 241,000 bushels of grain. During the same period the elevator unloaded 155 cars, averaging 700 bushels of grain to the car. The vessels were the Tacoma, John Kelderhouse, City of Sheboygan, York State, American, Union, Angus Smith, and R. A. Packer. Five of these got full loads at the Iowa.

Sunday morning the schooner Rainbow was towed into port in a disabled condition, and about the same time the Canadian propeller Alma Munro came in with a badly disfigured bow. The Rainbow left here a few hours before, and had not lost sight of the harbor lights when she was run into by the Munro, carrying away her headgear. The Munro got the worst of the encounter, for the upper part of her stem was twisted off, all of the stanchions and rail on her starboard bow were smashed, and a large section of the forward part of her passenger cabin was torn out. The passengers were badly frightened.

The schooner Clara, of Manistee, Captain Hans Olsen, was wrecked off Miller, Ind., on the 24th, and the captain was drowned. John E. Gustavsen, who was the only sailor on board the little hooker, related to me the following circumstances: "We left St. Joseph, Mich., Saturday at 9 p. m. for Chicago, with 17,000 feet of 3-inch oak plank. About 4 p. m. Monday, when off Chicago, a heavy squall came on, and we were compelled to make for South Chicago. The squall abated and we made for Chicago, arriving off there about 9 p. m, when a heavy gale struck us and we were compelled to run before it, which we continued to do all night and until forenoon of the next day, when seeing land ahead we cast our anchor about three-fourths of a mile from the shore. The sea was very heavy, and after riding at anchor about an hour the hatches bursted and the schooner filled and capsized. I clung to the wreckage and the captain did the same. I lost sight of the captain and gained the shore by clinging to some planks, and was greatly exhausted." Captain Hans Olsen leaves a wife and a son about 3 years of age, who reside at Manistee, his former home. The body of a man, supposed to be that of the unfortunate master of the lost Clara, was washed ashore at Miller, Ind.

Grain freights have advanced to 4¼ cents on wheat and 4 cents on corn to Buffalo, and 3¼ cents on corn to Georgian Bay ports.

At the Chicago Drydock Co.'s dock the schooner Evra Fuller was in for a new keel, forefoot and calking; the schoonor Havana for new keelsons and calking; the schooner Thomas H. Howland for calking bottom; one of Green & Co.'s dredges for calking all over; the propeller Alma Munro received new stem, stanchions, rail and part new cabin; the schooners Melvina, Lottie Wolf, steambarge New Era, propeller City of Traverse and barge Carney received minor repairs.

Last spring towing rates in Chicago harbor were advanced 33⅓ per cent. The managers of the tug lines have voted a further advance of 12½ per cent to take effect September 1. Beginning on that day towing rates will be subject to a discount of 10 per cent from the full tariff. Last year a discount of 40 per cent was allowed.

The new barge George Nester came in Monday with probably the largest load of lumber ever taken by a vessel on the lakes. She left Baraga, on Lake Superior, Tuesday night, in tow of the propeller A. W. Colton, having on board 1,208,000 feet of green lumber. When out two hours it was discovered that the barge was down too deep at the nose and she had to put back to lighter. After doing so, she still had over 1,100,000 feet in her, 550,000 of which was in her hold. This is her first trip.

The rates on lumber remain firm and unchanged to Chicago. Room continues in strong demand. Prices steady, as follows:

	Dry.	Green.
Muskegon and White Lake	$1.62½	$1.75
Pentwater and Ludington	1.62½	1,75
Manistee	1.87½	2.00
Frankfort	2.00	2.12½
Sturgeon Bay	2.00	2.12½
Menominee, Cedar River, Ford River and Escanaba	2.12½	2.25
St. Ignace and Manistique	2.25	2.37½
Cheboygan	2.50	.....
Alpena	2.75	3.00

Cedar ties from Lake Michigan ports to Chicago, on the rail, 9½ and 10 cents; ties from Lake Huron ports, 10 and 11 cents; cedar posts, 6½ and 7 cents. Pine slabs from Muskegon to Chicago, $2 per cord.

The Chicago board of marine underwriters met Tuesday and advanced premium rates on grain cargoes as follows, to take effect after the 1st of September: From Chicago to ports on Lake Michigan, 30c; per $100; ports of Lake Superior, 50c; ports on Lake Huron, Sarnia and Detroit river, 40c; ports on Georgian Bay, 50c; ports on Lake Erie, 50c; ports on Lake Ontario, 60c; Ogdensburg, 65c; Montreal, $1.

H. H. Baker, of the firm of Howard H. Baker & Co., shipchandlers, Buffalo, was in Chicago this week.

The propeller Peerless arrived Sunday morning with a large number of passengers from Lake Superior, and on Wednesday afternoon the propeller Lawrence arrived with a large number from northern Lake Michigan ports. WILLIAMS.

DETROIT.

Commander Horace Elmer, inspector of the eleventh lighthouse district, has issued the following notice to mariners: In a line between the Grosse Pointe lightship and the center of Belle Isle, the course given in the notice to mariners, about one-third of a mile from the lightship, there are, at present, spots with only fifteen feet, eight inches of water. Deep laden vessels desiring to avoid these should pass about 500 feet to the northward and westward of the lightship and steer directly for Windmill Point light for a half mile, then change course for the center of Belle Isle. Nothing less than sixteen feet will be found.

The steambarge D. C. Whitney arrived down Monday afternoon. After being temporarily patched up at Port Huron she started down for Detroit with two steam pumps and seven of her own working. When she had almost reached here it looked as if she would sink, as the pumps became clogged up with iron ore and would not work. Captain John Quinn went under the boat and found the leak. She had a hole in her bottom just forward the fore hatch, which is about three feet across. Her fore foot is also gone. Captain Quinn stuffed some pillows into the hole and stretched canvas over it, and the vessel is not now making any water. Aft, about ten feet forward of her cabin, the whole deck of the vessel is sprung about six inches. Just how much more damage has been done to her bottom and hull can not be told until the vessel has been docked. She will either be docked here or at Cleveland. Captain Peter July, who has been in the employ of Mr. Whitney for twenty-five years, in speaking of her getting ashore, said: "The night was exceedingly thick, and it was impossible to see any great distance, and the only way that I can account for her going ashore where she did is that the compass must have been off. The compass has, during the summer, been a point to the eastward, but as we had on a different kind of one than we usually carry I am certain that that had something to do with it." It was the revenue cutter Fessenden that pulled the Whitney off Saturday afternoon at 4 o'clock, and Captain July is warm in his praises of the officers and men of the Fessenden for the services rendered. He also speaks highly of the Sand Beach life saving crew, who worked for the vessel like Trojans.

MARITIME LAW.

PRACTICE—SECURITY ON APPEAL FROM DISTRICT TO CIRCUIT COURT—AMOUNT—STIPULATION FOR VALUE—RE JUSTIFICATION OF SURETIES—BOND TO MARSHAL.

U. S. District Court, Southern District of New York.

Brown, J.

The decree in this case in favor of the libelant is for the sum of $40,000 besides costs. Upon the arrest of the vessel at the time of the commencement of the action, that sum was taken as her agreed value, and a stipulation in that amount with surities was given by the claimants from the decree of this court to the circuit court the question now presented is whether the defendant, in order to stay execution, shall be required to give new security for the whole amount of the decree and costs, or security on an amount sufficient to secure "just damages for delay, and the costs and interest on the appeal," upon the analogy of the 29th general rule of the supreme court. That rule provides only for "supersedeas bonds in the circuit courts." It does not expressly embrace appeals from the district court to the circuit court, although it covers admiralty causes, in which security for the value of the property arrested, as in this case, will be in the custody or control of the appellate court. Since the promulgation of this rule in 1867, and its re-affirmance in the case of Jerome v. McCarter (21 Wall. 17,) there is no question that upon an appeal from the circuit to the Supreme court, the additional security required would only be for the damages of the delay with costs and interest on the appeal."

There has not been, so far as I am aware, any statutary provision to regulate either the mode of appeal from the district court to the circuit court, or the security to be given in order to stay execution upon such appeals in admiralty causes.

Upon such appeals every Judge signing the citation is required to take "good and sufficient security to answer all damages and costs, when the writ is to stay execution." In the absence of any statutory regulations, bills, I, under the general power of the court to regulate its own practice, prior to 1838 formulated rule 152 of this court, providing that when an appeal should be entered the appellant "shall within ten days thereafter give security for damages and costs" in order to stay the execution of the decree. This rule was in evident analogy to the statutory requirements upon an appeal from he circuit to the supreme court. Under this rule the practice in this court was the same as the practice in the circuit court under the statutes above cited. By repeated decisions of the supreme court up to the year 1867 that practice required new security to be given upon an appeal for the whole amount of the decree, without reference to any security previously given. In the case of Rubber Co. v. Goodyear, 16 Wall. 123,) a different construction from what had formerly prevailed was given to the language of the statute requiring security for "all damages and costs." It was then held that any security previously given and under the control of the court ought to be taken into account in determining what additional security should be deemed "sufficient for the costs and damages" upon appeal. Rule 29 was at that time promulgated, expressly declaring that upon supersedeas bonds in the circuit court "where property was in custody under admiralty process or the proceeds, or a bond for the value thereof under the control of the court, indemnity in all such cases is only required in an amount sufficient to secure just damages for delay and costs and interest on the appeal." Upon elaborate argument in the case of Jerome v. McCarter (21 Wall. 17, the supreme court refused to modify this rule, and the equity of its provisions was re-affirmed.

These decisions do not in strictness embrace the practice in this court because neither the 29th rule, nor the statutory provisions, expressly include appeals from the district court. But as the 152d rule was based upon the analogy and the equity of the statute, and to assimilate the practice in both courts, the reasons for the 29th rule and the decisions of the supreme court in construing the application of the phrase "damages and costs," as well as consistency in practice, would seem to require a corresponding modification of the practice and of the interpretation of the same words in the rules of this court.

In the English practice new security for the whole amount was required upon appeal, for the reason that "the securities below are not bound in the cause on appeal." The same reason is assigned in Clarke's Practice.

By the 10th and 11th rules of the supreme court on admiralty, stipulations for the release of property under arrest must require the parties to abide by and pay the money awarded by the final decree rendered by the court or appellate court, if any appeal intervenes. And such is the stipulation given in this case. The general rules in admiralty were promulgated under the act of August 23, 1842, (5 St. at L. p. 518) some years after the 152d rule of this court above referred to. Rule 10 provides expressly that the security given shall run to the appellate court as well as to the court below. There is no other rule of the supreme court on this point.

There is no question that stipulations given under these rules, which in terms agree to pay the amount awarded in the appellate court, are as available in the appellate court as in the district court. The reason given in the ancient practice for requiring new security no longer exists in such cases. Such seems to be the intimation of Judge Conkling in his treatise Adm. 387, 405. The very stipulation itself, so long at least as the securities are responsible, is a continuing security, and seems so far to answer the requirements of the rule. For the rule does not require security for the amount of the decree and costs, but only for "damages and costs." If the vessel had remained in custody until the appeal was perfected, she would be released upon the same security that already exists, and the additional security required would be for the delay and costs only. The bond already given goes into the circuit court with precisely the same effect. So also, a new bond for the whole amount with the same sureties could not be rejected, if the sureties are responsible. To give a new stipulation with the same sureties would be an idle form, except for the purpose of a new justification; and a rejustification of the old sureties may be ordered upon the reasonable demand of the respondent as a condition of accepting the existing bond *pro tants*. If the old sureties are unable, or are unwilling to justify anew, a new bond for the whole decree should be executed.

The court will at all times seduously endeavor to protect the parties from loss through insufficient security; but this, I think should be done by the care and scrutiny exercised upon the acceptance of sureties, and in their justification, rather than in the duplication of bonds or stipulations for the same thing. Considering the long time that often elapses after the release of the vessel from arrest at the time of the commencement of the action until the appeal, a rejustification of the sureties will be ordered, as a condition of their acceptance, if reasonably required; but if the sureties are entirely satisfactory, the existing stipulation, which runs in terms for the payment in the appellate court, should be accepted, as far as it goes.

Bonds given to the marshal under the act of 1847 do not in terms provide for the payment of the decree in the appellate court, but only to abide and answer "the decree of the court" in such cause. In such cases it may be necessary to take a new bond for the whole amount. I do not pass upon that question now.

In the present case, if the sureties on the existing stipulation are approved, additional security for $7,000 will be sufficient to cover the damages and costs in the circuit court. Should an appeal be taken to the supreme court as an affirmance by the circuit court, the additional delay will be then provided for by the requirement of still another bond.

June 29, 1887.

LITERARY NOTICES.

ST. NICHOLAS opens with a delightful frontispiece, by Mary Hallock Foote, illustrating "Tib Tyler's Beautiful Mother," a charming tale of life at a seaside watering place, by Nora Perry. There are several seasonable but inoffensive little morals tucked away in the story, together with some dainty drawings by Albert E. Sterner. A paper that will interest boys is the article on "Christ's Hospital," the famous "Blue-coat School" of London." General Adam Badeau writes comprehensively and thrilliingly of the "Battle of Gettysburg" and of Pickett's glorious but futile charge while George J. Manson shows the young man who is "Ready for Business," and wishes to become a "Sea Captain," the bright and seamy sides of a sailor's life, and the best and safest way of accomplishing his ambition. The serials by Miss Baylor and by H. H. Boyesen are continued, with joy for "Juan and Juanita," and sorrow for "Fiddle John's Family." The "Brownies" indulge in "Archery."

The interest of the Atlantic for September may be said to depend greatly on most interesting installments of its two serial stories by Mrs. Oliphant and Mr. Crawford. Both of these are at their climax. Dr. Holmes, in "Our Hundred Days in Europe," tells about his stay in Paris, and his visits to some other places. The Atlantic, in fact, seems rather devoted to France, for this number has also an article by Ellen Terry Johnson, entitled "Le Roi Manque," being an account of Louis XIV.'s promising son, the Duke of Burgundy, who, had he succeeded his father, would have made French history so different. Another article, by John Bach McMaster, upon "Franklin in France," shows how Franklin succeeded in making himself the idol of the French at the period subsequent to the Revolution. Houghton, Mifflin & Co., Boston.

THE COMPASS.

The property of polarity in the loadstone, that is, the tendency of the magnetic bar when suspended freely to assume a general north and south direction, is one of the mysteries of nature. It is one of the phenomena that we must accept, but can not adequately explain, for to account for it by the supposition of magnetic currents in the earth itself is simply to bring in another fact as far beyond adequate explanation by the present attainments of the human mind as the other. The variations of the needle of the compass from strict polarity are numerous, some due to general and some to local causes. The former are beyond the skill of men to control or explain, and all that can be done is to ascertain the amount of variation by reference to the true meridian, and allow for it. On certain lines of the earth's surface, called lines of no variation, the needle points accurately. Such a line now passes through the United States a little east of the eightieth meridian of longitude. East of this line the variation of the needle is toward the west, increasing in amount with the distance from it, and on the other side the variation is toward the east, but is by no means uniform at any point, and seems to vibrate between certain limits. In the eastern states the north pole of the needle is moving westward at the rate of about one degree in twelve years. In London the variation of the needle was, in 1576, 11¼ degrees to the east; in 1662 it was reduced to nothing, and then slowly advanced westward, reaching a maximum of nearly 25 degrees in 1815, since which time it has been slowly decreasing. The variations of the compass in ships from local causes is often a source of great difficulty, as it is not a constant determinable error. It varies with the position of the vessel, being greatest when she heads east or west, and least when she heads north and south. It is also affected by the careening of the vessel, and is much disturbed by the iron used in the construction of the ship. On iron clad ships several compasses have to be used, placed in different parts of the ship, while comparative observations are constantly made of their indications.

The consorts of the tug Joseph Goldsmith, the barges City of Two Rivers and No. 1, dragged their anchors and went on the beach at Jacksonport at daylight Monday morning. They were scuttled when they struck the beach. The tugs Spalding and Goldsmith will attempt their release.

ROBERT E. HILLS,
57 & 59 North Wells St., Chicago, Ill.
Telephone 3321.
STEAM FITTING AND HEATING,
Wrought Iron Pipe & Fittings
ENGINEER'S SUPPLIES.
General Jobbing Work Done Promptly.
Also, Proprietor of North Side Brass Works.

CAPT. GEO. A. SIMPSON,
Compass Adjuster,
COMPASSES, BAROMETERS, PATENT LOGS AND MARINE GLASSES REPAIRED,
Schooners can have their Compasses Adjusted for Local Attraction at the time of repairs by stating how much they are out on East or West Courses, and which way it leads, North or South of above Courses
161 River St., Cleveland, O.

DETROIT & CLEVELAND.
STEAM NAVIGATION CO.,
BETWEEN
CLEVELAND & DETROIT,
MACKINAC ISLAND, ST. IGNACE,
ALPENA, SAND BEACH,
PORT HURON, ST. CLAIR,
OAKLAND HOUSE, MARINE CITY

Special Sunday Trips
BETWEEN CLEVELAND AND DETROIT
DURING SUMMER MONTHS.
For full information, rates, tickets, etc., apply to E. B. WHITCOMB, Gen. Pasgr. Agt., Detroit, Mich, T. F. NEWMAN, General Agt, Cleveland, O.

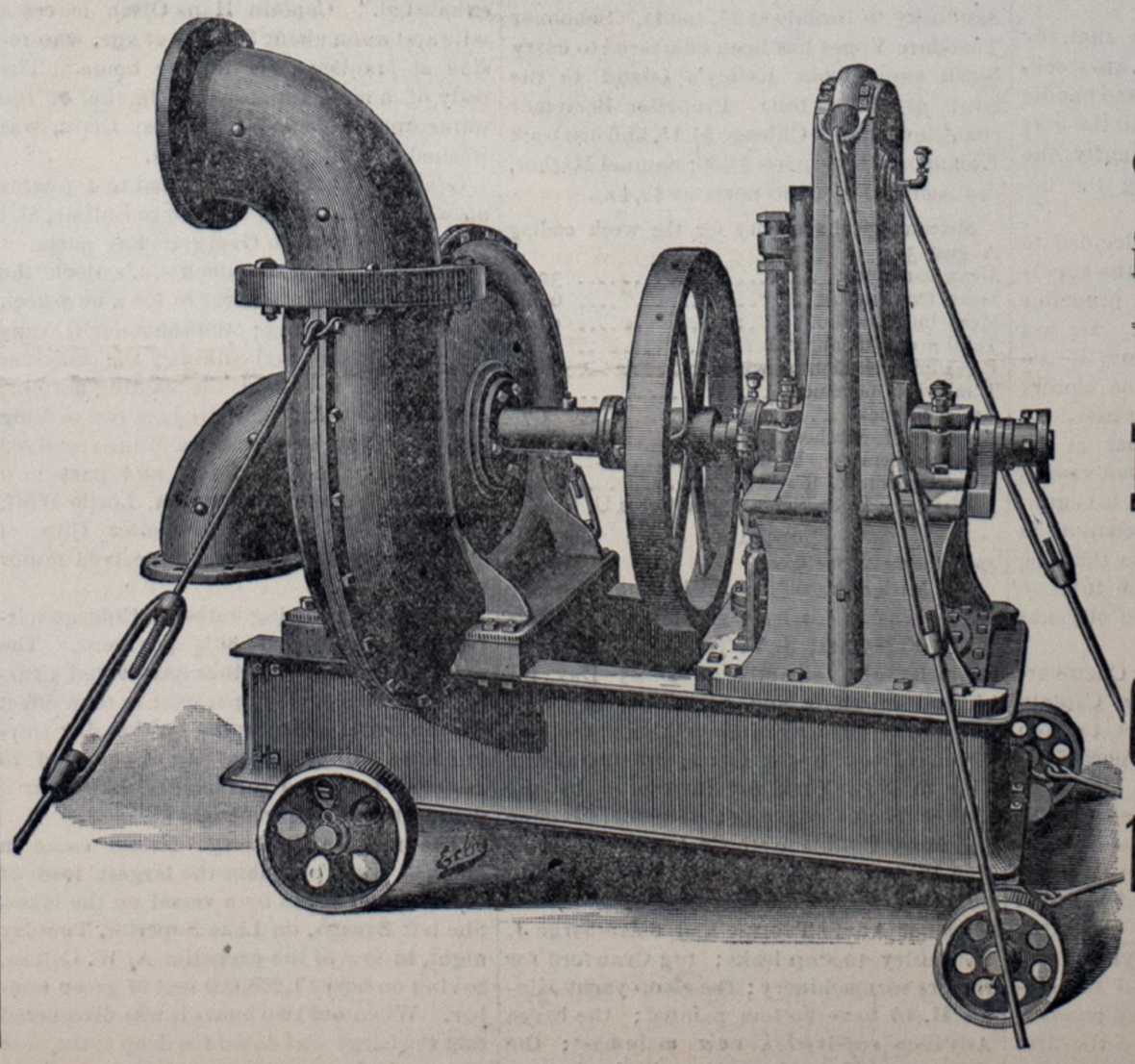
Travelers Information Bureau,
224 Bank St., CLEVELAND O.
Where may also be found a full line of ocean tickets

THREE HOURS LAKE RIDE EVERY EVENING Except Sunday. Cleveland Lighterage Co.'s steamer
AMERICAN EAGLE,
Leaves foot of Superior street at 7:30 p. m., returning at 10:30, giving three hours on Lake Erie. Fare, only 25 cents. No liquors allowed on board. Music for dancing by Prof. Balas Orchestra,
H. R. ROGERS Manager. T. F. NEWMAN, Pres't.
Special lake rides every Saturday afternoon at 3:30. Fare 25 cents.

AN IRON MINE FOR SALE.
This mine is on the shores of Lake Huron, close to a good harbor. First-class ore, assayed 70 per cent pure iron. This ore is said by experts to be much better than Lake Superior iron ore, and the only ore of its kind so far discovered on this continent capable of making Bessemer steel. Will sell outright, on shares or a royalty. Specimens of ore furnished and inspection of mine solicited.
Also, two silver mines on Lake Superior, close to a good harbor. Specimens furnished. Apply to
MARINE RECORD, Cleveland, Ohio.

WANTED.
We have a customer who wants to purchase a small steambarge. Address, stating price and erms, THE MARINE RECORD, Cleveland, O.

GOULDS AND AUSTIN.
CENTRIFUGAL PUMPING MACHINERY.



Manufacturers of the Finest Wrecking Pumps in the World.
Full Line Always on Hand.
GOULDS & AUSTIN
167 & 169 Lake-st.,
CHICAGO, ILL.

H. D. COFFINBERRY, PRES'T. ROBERT WALLACE, VICE PRES'T. WM. M. FITCH SEC'Y.

THE CLEVELAND SHIP-BUILDING COMPANY,

Detroit and Center Streets, Cleveland, Ohio,

IRON SHIPS,

Marine and Stationary ENGINES AND BOILERS,

Blowing Engines and Steam Hammers,

AND MILL GEARING AND CASTINGS.

We take pleasure in announcing that we have purchased the property, business and good-will of the Cuyahoga Steam Furnace Company, and will add to these works, so long and favorably known, a first-class Iron Ship-building Department, with sufficient room and all modern facilities for building two large vessels at the same time, and a Boiler Shop with most approved tools for large work, including Tweddell's Hydraulic Plant for flanging, riveting, etc.

We have associated with us Messrs. H. D. Coffinberry and Robert Wallace, late of the Globe Ship-building Co., and the Globe Iron Works, and Wm. M. Fitch, late of the Winslow Line of Steamers. We have made the following appointments: Mr. O. N. Steele, Assistant Superintendent; Mr. Thomas W. Bristow, late foreman of Wyandotte Ship Yard, Superintendent of Ship Yard; Mr. Quincy Miller, Superintendent of Boiler Shop; Mr. John Stoney, Superintendent of Foundry, and Mr. Jas. C. Wallace, Draughtsman.

We purpose building Iron and Steel Vessels of all descriptions, Marine and Stationary Engines and Boilers, Blowing Engines, Steam Helve Hammers and such other work as our large assortment of patterns eminently qualify us to build, at a minimum price.

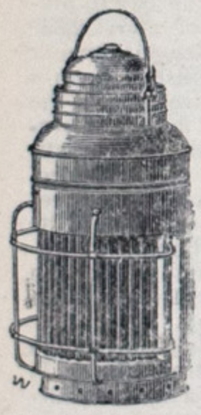
Your patronage is solicited, and we trust that the excellence of our work, with fair dealing and strict attention to business, will secure its continuance.

THE CLEVELAND SHIP-BUILDING COMPANY.

SIGNAL LAMPS

For Steamers and Sailing Vessels.

PATENT FLUTED LENS AND PERFECT COLORS.



GET THE BEST AND AVOID COLLISIONS.

These Lamps give a more brillant light than any Signal Lamp now in use.

They have been adopted by the principal Ocean and Lake Steamers

Over Ten Thousand Now in Use.

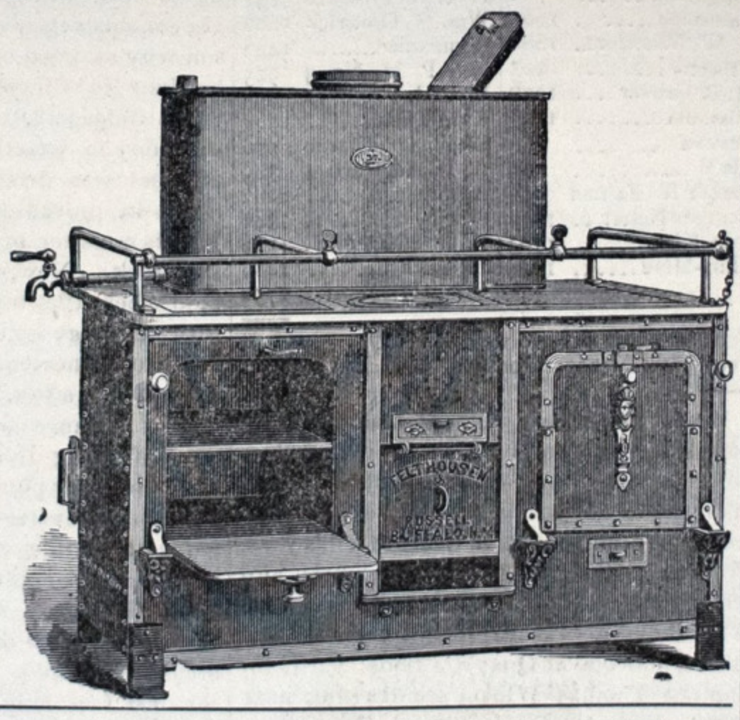
WE ALSO MANUFACTURE THE CELEBRATED

French Wrought Iron Ranges and Broilers of all Sizes for Steamers and Hotels.

Steamboat Copper, Tin, and Sheet Iron Workers.

FELTHOUSEN & RUSSELL,

139 & 141 MAIN ST., BUFFALO, N. Y.



Cleveland Dry Dock Co,

Shipbuilding, Drydocking, Repairing and Spar Making.

CLEVELAND, OHIO.

MARINE REPORTER AT THE STRAITS.

Reports of Passing Vessels a Specialty.

Messages Delivered to Passing Vessels Day or Night, Weather Permitting.

MY ICE REPORTS MAY BE RELIED ON.

SEVENTEEN YEARS EXPERIENCE.

The Patronage of the Marine Public Respectfully Requested--Charges Reasonable.

F. J. STIMPSON, MACKINAW CITY MICH.

Established in 1859.

HENRY LEOPOLD.

Manufacturer and Dealer in all kinds of fine and plain

FURNITURE & UPHOLSTERY,

And Manufacturer of Counters, Shelving, Bank and Bar-room Fixtures.

Mattrasses and Vessel Furniture

A SPECIALTY.

Warerooms 798 and 800 Lorain-st., near Fulton. Factory 10 Willet-st.

CLEVELAND, OHIO.

WM. H. RADCLIFFE,

Shipbuilder and General Repairing.

OLD RIVER BED, Ft. OF TAYLOR St.,

CLEVELAND, O.

WILLARD & FILLEY,

[SUCCESSORS TO R. L. WILLARD]

SHIP AND ORNAMENTAL PAINTERS.

DEALERS IN

LEAD, OIL, MIXED PAINTS, GLASS, PUTTY, ETC.

All Kinds of Steamboat and Vessel Work a Specialty.

FINISHED LIBERTY CAPS FOR STEAMERS ALWAYS ON HAND.

57 Main Sreet, cor. Elm, Cleveland, Ohio.

Scott's New Coast Pilot

Corrected for Additions and Changes to the Opening of Navigation in 1887,)

IS SOLD BY

SHIP CHANDLERS

AND BY THE PUBLISHER,

GEORGE SCOTT,

AT 162 LARNED E., ST., DETROIT, MICH

WARD AND JACKSON,

SHIPSMITHS,

All Kind of Forgings, Bolts and Truss Rods for Building.

49 Main-st Cleveland

DETROIT BOAT WORKS.

BUILDERS OF

STEAM AND SAIL YACHTS, RACING SHELLS AND HUNTING CANOES

SOLE MANUFACTURERS OF

Clark's Patent Metallic Life Rafts and Wooden Life Boats.

YAWL AND ROW BOATS of all sizes in stock. Steam and Hand Steering Wheels made to order. SHOPS, FOOT DEQUINDRE ST., DETROIT, MICH. TELEPHONE No. 1154.

Moiles Tug Line.

Sault Ste. Marie, Mich.

Office on WATER ST., 5th door from Canal Park.

Tugs Tom Dowling, Frank Tracy and Laura Gibbs.

All kinds of Tug Work Done with Promptness and Dispatch. Tugs and Lighters Always in Readiness.

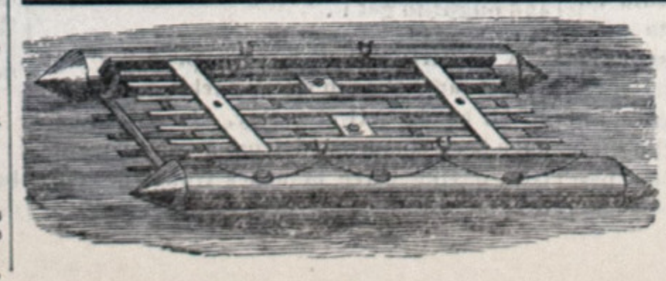
RAFT TOWING A SPECIALTY.

Correspondence Solicited.

WINDLASS FOR SALE.

The undersigned have a Hadfield Patent windlass or a one and three-eighths inch bar chain for sale cheap.

JOHNSON & BATES,
227 Erie St., Racine, Wis.



THOS. DREIN & SON

BUILDERS OF

METALLIC LIFE BOATS

and LIFE RAFTS of all classes Government and Pleasure Boats of Wood. Block Cork Life Preservers. Sole manufacturer of Capt. JONATHAN CONE'S celebrated

Patent Life Rafts

Tatnall-st and Railroad, Wilmington Del.

Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PROP'

BRANCH OFFICE:
252 South Water Street, Chicago, Illinois,
THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:
One year, postage paid.....$2.00
Six months, postage paid..... 1.00
Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

CLEVELAND, O.—G. F. Bowman, corner of Pearl and Detroit Streets.

Evans & Van Epps, Superior street, Cleveland.

R. A. Castner, 254 Detroit street, Cleveland.

W. A. Ford, corner of Bridge and Pearl streets.

ASHTABULA HARBOR, O.—C. Large.

CHICAGO, ILL.—Joseph Gray, 9 West Randolph Street.

CHICAGO, ILL.—H. B. Hansen, 33 West Randolph Street.

BUFFALO, N. Y.—Miss McCabe, Elk Street, near Ohio.

Charles McCready & Co., No. 14 E Seneca St.

Mrs. Mary Jannigan, on Michigan St. Swing Bridge.

DETROIT, MICH.—N. F. Stewart, Ft. of Woodward Av.

STAR ISLAND, ST. CLAIR FLATS, MICH—McNiff & Son.

DULUTH, MINN.—C. F. Johnson, 323 West Superior Street.

MARQUETTE, MICH.—J. A. Vannier.

ESCANABA, MICH.—Wm. Godley.

ESCANABA, MICH.—George Preston.

SARNIA, ONT.—D. McMasters.

OWEN SOUND, ONT.—J. Sharpe, Jr.

KINGSTON, ONT.—F. Nisbet, corner Brook and Wellington Streets.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., THURSDAY, SEPT. 1.

SHIPBUILDING ON THE LAKES.

Notwithstanding the good freight rates paid by shippers on all classes of merchandise, it is a positive fact that tonnage is not sufficent to supply the demand. This fact is realized by capitalists and efforts are being made to provide for the deficiency against the opening of next season. While much tonnage was built this season more will be built for next season's trade. All the shipyards on the lakes are now running to their full capacity. New yards have sprung into existence and yet many would-be investors can not place an order for a new steamer. It is interesting to note that all but one of the new vessels contemplated and under way will be furnished with steam power, and will be of large size. In truth, as we have remarked from time to time, the vessels launched on the lakes have exceeded in grand proportions and excellence of build those set afloat in any other section of the United States. This is shown in the weekly reports of the commissioner of navigation. Scarcely a week passes but a fine large steamship is added to our lake tonnage. We have in truth the flower of the merchant marine of the country. We also have the business, this season at least, to make these ships pay good rates of interest on the investment. The outlook at this time is that this active business, which does not partake of the artificial phase of a boom, will continue through next season and well into 1889, as a steady and legitimate demand causes it.

While sensational reports regarding the establishment on the lakes of another great iron shipyard are current, a yard individual to an iron mining company, in which that company, as report goes, intends to build fifteen 3,000 ton ore carriers for the transportation of its own ore, buyers of vessels are not deterred from giving new orders and vessel property continues to enhance in value. It is possible that this talked of enterprise may be deemed but a cunning policy. However that may be these fifteen 3,000 ton vessels could not all be put afloat in one yard on the lakes in time to have great perceptible effect on the demand for tonnage for next season, and we do not believe they will be built on the coast.

However late Cleveland engaged in iron and steel shipbuilding, it can not now be denied that city is the center and constructs more tonnage than any other point on the lakes, not only in iron but wood, and with the advent of the triple compound engines and the fine lines given to the new boats we are safe to say that Cleveland's products are not only more numerous but of equal carrying capacity to those built at any other point in the United States.

The total iron tonnage in the United States, 1885 and 1886, comparative, is as follows:

	1885.	1886
Total, United States	430,301	443,955
And by customs districts on the lakes:		
Buffa'o Creek	12,414	14,365
Erie	8,175	8,175
Cuyahoga	5,460	7,202
Detro t	5,147	7,921
Michigan	2,515	2,515
Chicago	282	282
Duluth	38	38
Total Northern Lakes	34,041	40,498

To summarize, out of a total iron tonnage in the United States in 1885 of 430,391 tons, there was in the lake districts 34,041, and in 1886 the comparison with a total in the United States of 443,955, that of the Northern Lakes was 40,498, showing the per cent of gain is largely with the lake districts, the total increase in the United States being in one year, 13,654 tons, and that of the lakes 6,457 tons, or equal to one half of the entire increase in iron tonnage.

Since this report, which closed with the fiscal year of 1886, on June 30, great additions have been made to the iron tonnage of the lakes without a corresponding increase on the coasts and rivers. Many new iron vessels have been launched, chief among which are the Susquehanna 1850 tons, Owego 2200 tons, Cambria 1878 tons, Chas. J. Sheffield 1700 tons, Ira H. Owen 1753 tons, Fayette Brown (composite) 1740 tons. In addition to this list of completed iron steamers at work in this season's trade we have under contract a large steel steamer at Union Drydock, Buffalo; six at the Globe Iron Works Co's yard; two at the Cleveland Shipbuilding Co's. yard, Cleveland; two at the Detroit Drydock Co's yard at Wyandotte. All of these new steamers will have powerful triple expansion engines.

The new wooden ships over 100 tons burden launched on the lakes that have taken part in this season's trade are of the best class, many taking A1* rating, all being propellers except the barges Wadena, 1077 tons and Annabel Wilson, 467 tons, net: The propellers are tabulated as follows:

Name.	Tons.	Name.	Tons.
Veronica	1093	Keystone	504
Roswell P. Flower	1593	Manhattan	1546
Lansing	1611	Samuel Mather	1576
Wiley M. Eagan	1677	Horace A. Tuttle	1585
Gettysburg	1358	Robert R. Rhodes	1576
Saugatuck	160	H. & A. Morse	134
Louisiana	1600	Wm. H. Gratwick	1688
F. W. Wheeler	1688	Roumania	1442
Atlantis	107	F. & P. M. No. 3	925
M. B. Grover	1996	Wyoming	1953
Missoula	1926	Kaliyuga	1995
Puritan	290	Stephen C. Clarke	276
Ida E.	182	A. D. Hayward	305
Joseph R. Farnan	410	Aurora	2282
George Nester	1300	Sitka	1741
Iron King	1703	R. P. Fitzgerald	1682
Elfin-Mere	1054	Bulgaria	*1486
		Wm. H. Wolf	1750

Total gross tonnage, in wood.....45,738
Total gross tonnage, iron and wood.....55,003
——*Net tonnage.

While the above statement makes quite a good showing of tonnage for one year, it does not comprise all that will be afloat in time to take part in the business of the season. The steamer building at John Craig & Son's yard, Trenton, Michigan, for J. C. Gilchrist and others will be launched next week; that at Wm. Radcliffe's yard for Mr. Vance and others, and one at Quayle's Sons' yard, for Captain Thomas Wilson are drawing near completion.

In addition to the above there is being built at Mills' yard, Buffalo, a large steamer; at Quayle's Sons' yard an order has been closed for a large steamer and consort; at Radcliffe's yard, Cleveland, a steamer of good dimensions will soon be commenced; the Detroit Drydock Co., is engaged on two steamers and the other yards in the Michigan district, Trenton and Gibraltar, are all busy on new work. At Bay City F. W. Wheeler, has three new steamers under way; and Mr. James Davidson, is hard at work on two new steamboats, with a prospect for a contract for six others to go into the Vermont Central line. At Milwaukee both the yards have all hands full, the Milwaukee Shipyard Co. and Wolf & Davidson; the other yards, Marine City, St. Clair, Grand Haven, have all they can do.

Taken all together the outlook for a large amount of new tonnage to float on the lakes next season is good. In fact it would not be surprising if it would aggregate more than that of this season. Notwithstanding this rapid increase in tonnage, vessel owners seem to have confidence in the carrying business of the lakes and show a willingness to supply the demand for vessels of the best class. To those who think our lake tonnage is growing too fast for the development of the country, it will be well to say that during the year 1862 53,800 tons were added to the lake fleet, in 1863 68,000 tons, in 1868 56,800 tons, in 1869 49,400 tons, in 1872 44,600 tons, in 1873 92,400 tons, in 1874 92,000 tons, in 1881 73,500 tons, and in 1882 58,400 tons. These figures, which are official, show that usually, with an interval of three years, tonnage on the lakes became scarce and unequal to the demand, and two prosperous years in shipbuilding circles followed. This has been brought about by various causes, chief among which is the development of the iron mines in the west and the rapid extension of the great grain growing regions of the northwest. But the annual loss of tonnage on the lakes, which are subject to violent and quickly gathering storms, very nearly equals the amount built during the intervening dull seasons. While we believe that the new tonnage put afloat on the lakes to compete for the business of 1888 will be greater than that of this season, it will not be equal to that of 1873 (92,400 tons) or 1874 (92,000 tons,) while it can be well and truly reasoned that the demand will be much greater, owing to causes already assigned. But, the pessimist will say, the tonnage now being built is principally steam propelled, while that built in 1873 in a great measure depended on sails for propulsion. This is possibly true, nevertheless, we can say that the amount of tonnage set forth in the above statements for those years is nearly double that to be launched next year, and in that event will but equalize the difference between steam and sail.

DISCHARGING FACILITIES.

This is a question that has long deserved and indeed attracted the attention of vessel owners. With adequate facilities for discharging ore and coal our lake fleet could be made, perhaps, one-sixth more useful than it is now under the ancient system of bucket and wheelbarrow. Ashtabula and Fairport have made some strides in advance in the matter of discharging cargo, and both of those ports are rapidly drawing business away from Cleveland. Under these circumstances we must believe that inasmuch as the roads in Cleveland have their money invested in the old style hoists, they are lacking in enterprise if they do not make the necessary changes in order to facilitate business at this port.

The Leader has a communication from a gentleman well informed on the unloading business, who makes the comparison given below between this port and South Chicago. He conclusively shows that there is no reason why as good or better work could not be done in Cleveland. He says "that at South Chicago 2,013 gross tons of ore were unloaded in exactly seven hours, and that the boat was detained in port only eight hours in unloading and putting on fuel. This is a matter of every day occurrence at that dock. Now, compare this with Cleveland where the slow and expensive way of fifty years ago is still in use. Dump a little ore into a wheelbarrow, run it back by hand at best only a few feet above dock and only a short distance back. The results of this way of doing things is to drive our ore trade to other points. But aside from this injury to Cleveland there are points to be gained by fitting up Cleveland docks with improved machinery such as is used in South Chicago. The capacity of our dock front devoted to ore handling would be increased threefold. As, for example, a dock say 300 feet long, will accommodate one large vessel. The present manner of unloading will take the ore out in three days. The same vessel, unloaded with the improved machinery, would get out in less than one day. The same dock would, therefore, accommodate three boats in the time now consumed in unloading one cargo. Added to this the new machinery brings with it a greater height and longer distance back from the dock front, so that three times as much ore can be put on about the same space. This is strikingly shown by a comparison of South Chicago and Cleveland docks. The former has about 1,000 feet of water front. On this dockage 400,000 tons of ore will be unloaded this season, more than was unloaded on 3,900 feet of dock front in this city last year. The expense of unloading with improved machinery is also much less than the old way, which of itself would attract a large increase in business. Cleveland can have just such machinery as is in use in South Chicago, and ought to get it."

A PRIMITIVE anchor, very probably lost by the early French missionaries, was found at the head of Green Bay. It appears to have been constructed from a young maple tree, having three branches from the root. Another bar was fastened on. Thus far it is like a round topped stool with four legs. On the bottom of these legs were fastened, with mortise and tenon, the flukes which were bars of oak, crossing each other. Between the legs of the anchor the space is supposed to have been filled with stones to weigh it down.

ON Saturday the commercial bodies of Detroit listened to addresses from Congressman Butterworth and Erastus Wiman on the subject of commercial union with Canada. The character of the meeting was evidence of the interest which the subject has inspired among the trading class which is the one that would be most deeply and first affected by its consummation.

IT has been decided by Supervising Inspector General Dumont that the hulls and boilers of all steam yachts, no matter how small, must undergo inspection, and that their pilots and engineers must be licensed

LAKE FREIGHTS.

The scarcity of tonnage and the large amount of merchandise and produce to move has materially strengthened the market. An advancing tendency is apparent on ore, grain, coal and lumber. We quote:

ORE.	
Escanaba to Chicago	1.00
Escanaba to Ohio ports	1 65
Marquette to Ohio ports	1.95
Ashland to Ohio ports	2.45
Two Harbors to Ohio ports	2.50
GRAIN.	
Wheat, Duluth to Buffalo	5½c
Corn, Chicago to Buffalo	4⅛c
Wheat, Chicago to Buffalo	4⅜c
Wheat, Milwaukee to Buffalo	3¾c
Wheat, Detroit to Buffalo	2¾c
COAL.	
Buffalo to Milwaukee	1.25
Buffalo to Chicago	1.25
Buffalo to Duluth	75c
Cleveland to Milwaukee	1.00
Cleveland to Chicago	1.20
Cleveland to Duluth	1.00
Erie to Du uth	1.00
Erie to Chicago	1.15
Erie to Milwaukee	1.0c
Erie to Escanaba	70c
Sandusky to Ashland	1.00
Sandusky to Washburn	1.00
Sandusky to Milwaukee	1.00
Saudusky to Racine	1.10
Toledo to Ashland	1.00
Toledo to Washburn	1.00
Toledo to Duluth	1 00
Toledo to Milwauke	1.00
LUMBER.	
Bay City to Tonawanda	$2.75
Bay City to Ohio ports	2.50
Saginaw to Tonawanda	2.87
Saginaw to Ohio ports	2.50

NOTICE TO MARINERS.

Deputy Minister of Marine William Smith, of Ottawa, has just issued the following:

Notice is given that the light heretofore standing on the end of the Canadian Pacific railway wharf at Port Arthur, Thunder Bay, Lake Superior, was removed before the opening of navigation this year, and now stands upon the westernmost end of the breakwater, built out in the bay to protect the harbor, a distance of about 2,320 feet southeast one-half south from its former position. It has been established upon a cribwork block, rising five feet above the deck of the breakwater; its middle thirty-one feet from the extreme end of the breakwater. The light will be, as heretofore, fixed white; it is elevated forty-three feet above the level of the lake, and should be visible eleven miles from all points of approach seaward. Vessels running for the shelter of the breakwater will leave it on the starboard hand in passing.

Notice is also given that the front range light at Goderich, Lake Huron, which is located on the outer end of the north breakwater pier at the entrance to the harbor, is a fixed red light instead of fixed white, as described in the Canadian list of lights (No. 215).

The marine department is erecting a new light at Gargantee, at the northeast end of Lake Superior. This increases the number of Canadian lights of Lake Superior to fourteen. The department is also erecting a light at Mudge bay, Manitoulin island.

The Secretary of the navy has awarded the contracts for constructing the five new naval vessels for which bids were opened recently. Cruiser No. 1, the Newark, is awarded to Cramp & Sons for $1,248,000, according to the department's plans for the hull and the contractors' plans for machinery; cruiser No. 4 to Cramp & Sons (contractors' plans) for $1,350,000; cruiser No. 5 to the Union Iron Works, of San Francisco, department's plans for hull and machinery, for $1,428,000;) and gunboats Nos. 3 and 4 to N. F. Palmer, Jr., & Co., of New York (Roach's assignees.) at $490,000 each. The bid for the Union Iron Works, of San Francisco, was the subject of correspondence between Secretary WHITNEY and the president. The bid of Cramp & Sons for cruiser No. 4 or 5 was $1,410,000: that of the Union Iron Works was for $1,428,000. The Secretary left it to the president to decide whether the bid of the Union Iron Works is a fair price for the work, who decided in the affirmative.

KINGSTON.

It is said the new steel steamer being built at Deseronto will be able to accommodate 1,500 passengers.

MILWAUKEE.

The Milwaukee tug company has closed a contract with Reiboldt & Walters of Sheboygan, for a new steamship to cost $140,000. She is to have a carrying capacity of 95,000 bushels of wheat or 2,700 tons of ore. The tug company have leased the shipyard and really do the work themselves, Reiboldt & Walters being regarded as master mechanics. The steamboat is to be 290 feet over all, 275 feet keel, 40 foot beam, and 22 foot hold. She is to have a triple expansion engine and Scotch boiler.

The wheat has been taken out of the schooner Lady McDonald. Between three or four thousand bushels of her cargo are supposed to be wet. The vessel will be docked. The leak was found to be in her port quarter.

It was announced recently that the Chicago & Alton railroad company had bought the property of the Chicago drydock company. The announcement was premature, and was made before the deal was fully closed. However, it served the purpose of the marine interests and prevented the drydock business of Chicago from passing into the hands of a monopoly. When the marine men awoke to the fact that the purchase of the property would result in shutting out competition on ship repair work they hustled around and organized a stock company, bought the property themselves and will continue to run a drydock at the old stand. The transfer was made, the purchase price being $69,000, of which $42,000 is for the plant and the remainder for open accounts and other assets. The new company is made up of representatives of the lumber, cedar, vessel and tug interests. Among the subscribers are Ed. Ayer, J. S. Dunham, J. L. Higgie, Wm. Ripley and George Wood.

The Wolf & Davidson steamship company, including all the former Milwaukee stockholders in the Chicago drydock company, was incorporated Friday with the following officers: W. H. Wolf, president; Frank L. Vance, vice president; Thomas Davidson, secretary and treasurer. The new company will have control of the new steamship William H. Wolf, and will build and operate other steamships.

Two thirds of the propeller Wm. Rudolph has been bought of A. E. Banks by H. M. Benjamin and B. M. Weil for $12,350.

GRAND HAVEN.

W. H. Hargrave, master of the schooner Lady Macdonald, of Port Burwell, Can., which, on the 23d inst., sprung aleak off Saugatuck during a heavy gale while bound down, with a cargo of 19,000 bu. of wheat, has addressed a lengthy letter to the district superintendent of the life saving service at this port for transmission to the general department at Washington, wherein he expresses his heartfelt thanks and gratitude to the life-saving crew, stationed at Holland, Mich. After giving a detailed account of the hardships experienced by the crew and himself he concludes as follows: "Too much praise can not be bestowed upon that crew for the services rendered us. They pulled dead to leeward a distance of seven miles, during a heavy gale and high sea in one hour's time, and I am satisfied their timely arrival saved my vessel and cargo, both of which, without their help, would have been lost, if not our lives with it." The ship's crew was worn out by forty-eight hours' hard labor and loss of sleep, and it is estimated that about six feet of water was in the ship's hold, when the life crew arrived and relieved them.

Lieut. J. H. Rogers, inspector of the life-saving service, is spending a few weeks vacation in the city, accompanied by Mrs. Rogers and children.

The steamer F. & P. M. No. 1 encountered a sunken log in Manistee harbor Saturday evening, and broke every bucket of her wheel. She is in the drydock at Wolf & Davidson's receiving a new one.

FRANKFORT.

Special to the Marine Record.

The wrecking expedition of John Dodd, diver, with tug J. H. Martin and schooner Sea Gem, raised the boiler of the sunken propeller City of Boston, that has lain sunk for the past twelve years, near Herring creek. The engine will also be raised and brought inside. Mr. Banks, the owner of the wreck, pays them $2,500 for the recovery of the sunken property.

The Tonawanda Transportation Co.'s fleet steambarge Edward Smith and consort, John Hannaford, Robert L. Fryer, and S. E., Marvin, loaded with pine lumber and departed for Tonawanda. They will stop at Oscoda and pick up the barge Reindeer which loaded there. BURMEISTER.

WATERTOWN.

The barge Minnie Francis, consort of the steambarge Freemason, sprung aleak when about ten miles from Stony Point on her way down Lake Ontario. She became unmanagable. Her crew was taken off and she was cut adrift. She went ashore at the mouth of Sandy Creek.

PORT HURON.

Special to the Marine Record.

R. G. McCullough, the sub-marine diver, has taken the contracts to remove the two old wrecks in Sarnia Bay. The Canadian government offers the hull of the schooner Ottawa to any one who will remove it. I don't see much of anything to move. They are very liberal.

The barge Burnsides is all ready for business. She is in good shape, and is a better boat than she has been for ten years.

At Dunford & Alverson's drydock the barge Lone Star has been in for a general overhauling. Barge B. B. Icsman has just come out. She was recalked and received some new plank. Ferry Hiawatha is in for a rebuild. She will receive new frames forward and aft, ceiling, deck beams, etc., and come out as fine a ferry boat as there is on the lakes, at a cost of $7,000. Schooner Midland Rover is in dock to be repaired after the collision with the schooner Monterey on Lake Huron. She will need new rail, about thirty stanchions on the starboard side, new jibboom, bowsprit, and recalking.

The tugs O. W. Cheney and George B. Dickson are cleaning out and being inspected.

Mr. A. Hemmenger, the manager of the new wrecking company at this port, is at work getting the ore out of the Tilden, and says he will be ready to lift her by the 5th of September. He is working five divers and plenty of laborers in order to complete the job by that time.

At the Wolverine drydock the propeller Wright received a new shoe. The steamer J. C. Clark, and steambarges Schnoor and Oswegatchie were in for general repairs.

Captain G. W. McGregor, of this city, and Alex. Kidd, of Sarnia, have purchased the steambarge Belle Wilson, of Toledo. She is in the lumber trade between Georgian Bay and Toledo. JAY.

It is reported here that the steamer Cook will withdraw from the river line on the 15th of September. The steamer Idlewild will resume her old place again.

The steamship Sitka passed down last week. She is a very fine looking boat. Captain Wilson ought to be proud of her.

There was a good deal of excitement on the dock Friday. The steamer City of Alpena had just left the dock when the Cambria came along. It looked from the dock as if they let both boats go. When they passed the light the Cambria was ahead.

The schooner James F. Joy lost her main and mizzen topmast in a gale on Lake Huron last week and ran back here for repairs.

H. N. Jex, of this city, has taken the contract to raise the steambarge Walters, which sunk off Lorain this spring. Mr. Jex has been very successful in wrecking before, and he expects to have the boat in Lorain next week.

One of the best known ship builders on the lakes is Mr. Alverson, better known as "Dell." He has been very successful in all his shipbuilding. His last boat was the Homer D. Alverson, built in 1885, now owned by Gilchrist, of Vermillion, O.

Captain Dave Hutchinson, of this city, has resigned his position as master of the tug Winslow, and will take command of one NUFF CED.

MARQUETTE.

The total amount of iron ore shipped by lake to date is 2,651,112 gross tons, this being a gain of 579,165 tons over the shipments at the corresponding stage in the season of 1886. Compared with the season of 1885 the showing is still better, the lake shipments for this year already exceeding the entire output of the mines in 1885 by 194,528 tons.

The table given below shows the shipments by ports to date this season, and for the corresponding period of 1886:

Name of Port.	1887.	1886.
Marquette	499.396	553,488
Escanaba	1,232,787	886,397
St. Ignace	55,469	41,689
Ashland, Wis	652,018	401,146
Two Harbors, Minn.	211,442	189,227
Total	2,651,112	2,071,947

By ranges the shipments have been as follows: Marquette range, 1,090,103 tons; Menominee range, 697,549 tons; Gogebic range, 652,018 tons; Vermillion range, 211,442 tons.

During the week 178,914 gross tons of ore were forwarded by lake, of which quantity 29,757 tons went from Marquette, 75,926 tons from Escanaba, 5,239 tons from St. Ignace, 48,419 tons from Ashland, Wis., and 19,573 tons from Two Harbors, Minn.

Twelve of the big iron mines on Lake Superior have already shipped by lake 1,486,644 gross tons of ore.

SAND BEACH.

Special to the Marine Record.

This has been rather a lively week in marine circles.

The following craft have sought shelter here during the week: Tugs M. F. Merrick, Torrent, Swain, Winslow, International, and Shaungraun with dredge and dump scows.

The propeller Araxes and consorts came in, leaking, pumped out, and went on down.

The steamer Nipigon and consorts, tug John Owen and consorts, propellers E. K. Roberts and L. Pahlow, Fessenden, City of Concord and one barge, N. K. Fairbanks and one barge have all made fast to the piers at various times during the week.

LUFF.

MUSKEGON.

The tug Frank Geel was burned to the water's edge Monday night while towing the schooner Thomas Hume. The fireman and cook jumped into the lake and were rescued by a boat from the schooner. The captain and engineer were taken off by a passing tug. The Geel sunk, and is a total loss. She was owned by Berry Bros., valued at $3,000, and insured for $2,000. The Geel was 12 tons, built at Sheboygan by Nevels in 1872, rebuilt in 1881 and hailed from Pt. Sherman.

Barry Bros., of Muskegon, have lost two tugs by fire within forty-eight hours. Sunday night the tug Geel burned and sunk in Muskegon lake, and Tuesday morning the tug Jack Barry was burned to the water's edge, within a short distance of where the Geele went down. The Barry was valued ar $5,000. Both boats were insured.

On August 27 a man by the name of Joseph Brown fell into the lake and was drowned, although the night watchman made efforts for his rescue. His brother, S. A. Brown, of Kalamazoo, took the remains to Chicago for burial.

The Muskegon Boom Co. have rafted, up to the present date, 4,134,356 feet of logs.

TANNER.

TOLEDO.

Special to the Marine Record.

The big barge Aurora arrived Tuesday afternoon, in tow of the tug Gladiator. Everybody here, connected with marine business, freely expressed their admiration for this fine specimen of Cleveland shipbuilding. She will load grain at No. 5 elevator for Buffalo. It is calculated she will carry from 80,000 to 90,000 bushels of wheat on a fifteen feet draft.

Rooney's new tug, the T. H. Moore, has arrived. She is a daisy.

The tug Pathfinder went on the dock Monday to have a loose wheel and shoe tightened. The Christian will go in the last of the week to have her stern bearing tightened.

There is a large amount of grain being shipped out of here at present, mostly to Buffalo, at 2½ and 2¾ cents. H.

BUFFALO.

The underwriters have sold the schooner I. N. Foster as she lies on the rocks at Fisherman's shoal, to Leatham & Smith, of Sturgeon Bay, for $2,000.

The new propeller R. P. Fitzgerald, with wheat from Detroit, arrived Monday night. She loads coal for Chicago on an old charter.

Tugs in bringing the barge Keweenaw, lumber laden, inside during thick weather Tuesday, got her on the old dumping ground. She was released by four tugs uninjured, after a heavy pull.

With a demand for coal tonnage larger than the supply, freights have become buoyant and unsettled. Vessels to arrive are taken at best current rates. Just now shippers are offering rates according to their individual needs, and he who pays the most gets the boats. The steamer City of Cleveland and consort Thomas Quayle had been chartered for coal to Milwaukee at $1.15. Another shipper offered them $1.25. The former deal was cancelled and the vessels were placed at the top figure. Other shippers say that they will not give so high a rate, but that remains to be seen. Other charters: Steamers John F. Eddy, Tacoma, Cuba, schooners John Shaw, Donaldson, for Chicago, $1.15; schooner Penokee, for Manitowoc, $1.10; schooner John Magee, for Detroit, 30 cents; schooners C. B. Benson, St. Peter, for Toledo, 30 cents; steamer J. E. Potts, barge Keweenaw, for Portage, $1.25.

Canal freights were firm at 3¾ cents on wheat and 3½ cents on corn to New York.

BAY CITY.

The longshoremen's union held a meeting Wednesday night and raised wages to sixty cents an hour, an advance of ten cents, to take effect on the 1st. This is the highest price ever asked on Saginaw river for handling lumber. The union resolved to observe Monday as Labor Day.

Shipments from port of Bay City for the month of August show a gratifying increase over the past two months, and over the same month for past two years. The output is as follows: Lumber, 65,528,000 feet; shingles, 14,345,000; pieces lath, 2,625,000.

The propeller Elfinmere, built at Wheeler's shipyard for Joseph Gordon and Frank W. Wheeler, of this city, was launched at noon on the 16th. She is 202 feet over all, 187 feet keel, 34 feet beam, 21 feet hold. She went to Detroit Saturday to receive her machinery, a compound engine, 24 and 46 by 36-inch stroke, Scotch boiler 12 by 12 feet. Her carrying capacity will be about 1,200 tons. She will enter the ore, grain, and coal trade.

Vessel men predict another advance in freight rates soon.

AHOY! MARINERS!

The beacon light, which guides you safely in the harbor of pecuniary advantage is the Boston Dry Goods firm of *Kohn & Co.*, 213 Detroit st., near corner Pearl st., Cleveland, O., established since 1866 in this city, informing you of our specialty in supplying vessels with ☞ *Comfortables, Blankets, Table linen, etc* and that we *sew to order* at *shortest notice* ☜ *Sheets, Pillow cases*, or any necessary equipments for bedding.

☞ We are also pleased to inform you that we are the *only* manufacturers in this city who retail direct to consumers, none but *our own genuine home-made* ☞ *Flannel Shirts, Waterproof Shirts, Scarlet Flannel Undershirts* and *Drawers, Overalls, Jean Pants*, etc., or ☞ *make them to order* ☜ for the same price we sell them ready-made. ☞ All our Shirts are 52 inch wide, 36-inch long, extraordinarily well sewed. ☜ The *Custom Cutter*, associated with our merchant tailoring department offers to make *Gents' finest Cassimere, Broadcloth Suits*, in the *latest style*, guaranteeing the best fit and fine workmanship ☞ *for $8 less* ☜ than any other merchant tailor, because he has *no Rent to pay, does his own cutting*, and wants *to advertise himself*. Kohn & Co., 213 Detroit st., near corner Pearl, Cleveland, O.

To close the Estate

OF THE LATE

SAMUEL L. WATSON

THE FOLLOWING VESSELS

Are Offered for Sale.

Stmr, ST. LOUIS, a2,
Schr, CHAMPION, a2,
do JAS. D. SAWYER, a2,
do POTOMAC, a2.
do VOUGHT, a2
do S.L. WATSON, a2 1-2

For Particulars, and Where Vessels can be seen for Inspection, write to

Henry W. Watson,
16 White Bldg., Buffalo, N. Y.

LAKE SHORE & MICHIGAN SOUTHERN

Commencing Monday, May 16, 1887. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No 8, N. Y. B & A Express	*8 30 A M	*3 55 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 05 A M	†10 15 A M
No 24, Toledo Accom via Norwalk	†10 05 A M	†10 15 A M
No. 10, New York & Boston, "Flyer"	.....	*11 35 A M
No 12, N Y & B Fast Express	*2 20 P M	2* 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via "	§5 20 A M	5 35 A M
No 25, Mich Accom Norwalk	.....	†5 35 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	*6 15 P M	*6 40 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, § daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 35 A M.; arrive Grand Central depot, New York, 7.30 a. m.

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

M. E GAUL, City Passenger Agent.
A. J. SMITH, Gen'l Pass. Agt., Lake Shore Block

STEAMBARGE FOR SALE.

This is one of the finest steambarges on the lakes, and was built in 1884. She is in good condition in every respect, serviceable, easy to load and unload, and a great favorite. She can not be duplicated for the same money. Her dimensions are 131 feet keel, 143 feet over all, 23.4 feet beam, 8.4 feet depth of hold, and is classed A1½ by Inland Lloyds. She carries two masts. Her carrying capacity is 400 to 425 tons or 14,000 bushels of wheat, or about 240,000 feet of lumber on a dratt of 9 feet 9 inches. Her engine is high pressure 18x20 and her boiler 6¼x12 feet of 7-16 Otis steel. Speed 10 miles loaded or 11¼ light.

Address MARINE RECORD, Cleveland, Ohio.

ENRIGHT & HARDY'S

Tug Line, Pathfinder and S. J. Christian.

THE TWO LARGEST TUGS HERE.

Office 19, Madison St., Toledo, O.

VESSEL OWNERS AND AGENTS.

H. J. WEBB & CO.,

hip Brokers, Vessel Owners and Agents.

[ESTABLISHED IN 1856.]

H. J. WEBB & Co., will charter Vessels for Lake Trade. pecial attention given to Chartering Vessels in the ake Superior Iron Ore Trade, both for the season and ngle trip.

RCADE BUILDING, 101 ST. CLAIR ST.,

Room 27. Cleveland, Ohio.

TELEPHONE { Office, No. 338. Residence, No. 1328.

WARNER & BECKER,

Vessel Agents and Brokers,

ROOM 10,

Arcade B'ld., 101 St. Clair St,

CLEVELAND, OHIO.

J. J. H. BROWN. EDWARD SMITH

BROWN & CO.,

Ship Brokers and Agents.

Special Attention given to Surveying, Appraising and Settling Marine Losses.

Exchange Building, 202 Main-st., Buffalo, N. Y.

ALEX McDOUGALL,

VESSEL AGENT AND BROKER,

Duluth.

Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

PALMER & BENHAM,

Vessel Owners & Agents,

New Bank Building, corner of Superior and Bank Street, Cleveland, Ohio.

MOORE, BARTOW AND GILCHRIST,

Ship Brokers and Agents,

No. 101 St. Clair Street, Room 15.

CLEVELAND - OHIO.

JAMES T. ROSE,

Vessel Agent and Broker,

Room 4, Exchange Building, Duluth, Minn.
I have an excellent gang of Trimmers this season, Captain Miller's old Crew.
Special Attention Paid to Chartering Vessels, and seeing that they get dispatch in Port.

CORRESPONDENCE SOLICITED.

THOS. WILSON

MANAGING OWNER

Wilson's Transit Line.

Gen. Forwarder. Freight and Vessel Agent.

CLEVELAND, O.

JOHN P. DEVNEY,

Marine Collector.

Collections Promptly Attended to.

ASHTABULA HARBOR, OHIO.

PROCTORS IN ADMIRALTY.

Removal!

William H. Condon,

MARINE LAWYER,

240 La Salle cor. Jackson st.

CHICAGO, ILL.

ROBERT RAE,

Admiralty and Insurance Law Office,

Room 37 Merchants' building, CHICAGO. ILL.

WM. H. DeWITT,

Attorney and Proctor in Admiralty.

ROOM No. 6, BLACKSTONE BLOCK.

CLEVELAND, OHIO.

GEORGE E. HALLADAY.

Attorney and Proctor in Admiralty.

Marine Business Promptly Attended To.

OFFICE 21 BUHL BLOCK, DETROIT, MICHIGAN.

Capt. Alex. McFarland.

Iron Ore Trimmer and Contractor,

ASHLAND, WIS.,

Has a large gang of men, and is in a position to give prompt attention to all orders intrusted to him.

SATISFACTION GUARANTEED IN EVERY RESPECT

C. A. KING,

General Stevedoring. Discharging Loading and Ore Trimming Promptly Attended to. A Large Force of Men always on Hand. Information in regard to

DEPTH OF WATER OF ALL DOCKS IN

ASHLAND HARBOR

gladly furnished. Quick dispatch guaranteed. Patronage Solicited.

C. A. KING, Ashland Wis.

Grummond's Mackinac Line

Stmr. Flora, W. E. Comer, Master, Leaves TOLEDO every Tuesday at 9 a. m., City time,

Stmr. Atlantic, J. R. Jones, Master, Leaves CLEVELAND every Friday at 9 p. m., City time,

For Mackinac, St. Ignace, Cheboygan, Alpena, Oscoda and way ports. For Freight or Passage apply to ANDERSON & BATES, Agents, Dock Foot of Superior street, Cleveland, O.

S. B. GRUMMOND, Owner, Detroit, Mich.

A. J. MORSE & SON.

HULL'S

RUBBER STORE.

SPECIAL GRADES OF

WATER AND STEAM HOSE

FOR MARINE USE.

Steam Packing, Gaskets. Valves, etc., etc.

Rubber clothing, boots & shoes.

E. W. HULL,

237 Superior-st, CLEVELAND, O

Send for Price List.

CANVAS OIL BAGS for use on board Vessel and Steamer to lessen the dangerous effects of heavy seas. Write for pamphlet.

M. H Dodge & Co., 24 Broadway, Cleveland, O

GEORGE SAAL'S SON.

Copper-smithing of all Kinds.

VESSEL WORK A SPECIALTY.

403 and 405 Detroit-st., corner Duane-st.. Telephone 1638. CLEVELAND, O.

MARTIN MULLEN, Agent,

DEALER IN

Youghiogheny & Massillon Coal

DOCKS AT GOVERNMENT PIER AND RIVER BED SLIP.

Office, 81 Perkins Building, East Side of Main Street Bridge, CLEVELAND, OHIO.

Telephone No. 2701.

BOATS COALED DAY OR NIGHT.

Marine Glasses AND **Barometers!**

Spring import just received at

L. H. SOLOMONSON'S, Optician,

252 SUPERIOR-ST., CLEVELAND, O.

DAVID BARNHISEL, Agent.

DOMESTIC & STEAM COAL

Cleveland. Ohio

VESSELS SUPPLY STORE.

SPIEGLE BROS.

MARINE SUPPLY STORE

WHOLESALE AND RETAIL

Grocers. Bakers and Ship Supplies;

Fresh & Salt Meat of all Kind.

30 & 32 River-st., opposite Detroit Steamboat Landing, and 184 Broadway. Telephone 112, CLEVELAND, OHIO.

SHIP AHOY!

WHEN YOU ARRIVE AT SARNIA BE SURE TO CALL AT

CAPT. A. E. McGREGOR'S, FRONT ST., FOR GROCERIES AND PROVISIONS;

ALSO, AT

W. A. BUCHNER'S, OPP. CITY HALL for Fresh and Cured Meats, Ice, etc. Prompt delivery. Open day and night.

A. E. McGREGOR, Grocer. W. A. BUCHNER, Butcher.

S. B. GRUMMOND,

OWNER OF FIRST-CLASS

Tugs for Wrecking, Raft Towing, Etc.

ALSO, 16 STEAM PUMPS, ROTARY AND WORTHINGTON,

Improved Horizontal Straight Base Hydraulic Jacks.

Sub-marine Divers, Hawsers, Lighters, Etc.

WAREHOUSE AND OFFICE ON DOCK, BET. FIRST AND CASS STS.,

OWNER OF TUGS 'Winslow,' "Leviathan,' 'M. Swain,' 'Champion,' 'Wm. A. Moore,' and 'Oswego. } **Detroit, Mich.**

☞ OFFICE OPEN DAY AND NIGHT. SATISFACTION GUARANTEED. ☜

BRANCH OFFICES at PORT HURON & CHEBOYGAN, MICH

WRECKING TUG

LEVIATHAN, CAPT. M. SWAIN, STATIONED AT CHEBOYGAN

HOWARD H. BAKER & CO.,

Ship Chandlers & Sail Makers.

WHOLESALE AND RETAIL DEALERS IN

Cordage, Wire Rope Blocks, Canvas, Anchors, Chains, Paints, Oils, Naval Stores, etc.

Cylinder, Lard, Signal and Lubricating Oils a Specialty.

AGENTS FOR THE

American Ship Windlass Company for Lakes Erie and Ontario.

IMPORTERS OF NAUTICAL INSTRUMENTS OF EVERY DESCRIPTION.

We carry a larger assortment of goods in our line than any other house in the trade and can not be undersold.

Call at Our Mammoth Store and See for Yourselves.---18, 20, 22, 24 & 26 Terrace,

BUFFALO, NEW YORK.

The J. P. Donaldson Co.,

Ship Chandlers,

SAIL MAKERS AND RIGGERS,

Manufacturers of OARS and OAR LOCKS, Dealers in

Cotton Duck, Wire Rope,

Cordage, Etc.

22 and 24 Woodward Ave.,

DETROIT, MICH.

D. S. AUSTIN. EMMET AUSTIN.

D. S. AUSTIN & CO.

Ship Chandlers & Sail Makers.

WHOLESALE AND RETAIL DEALERS IN

Cotton Duck, Cordage, Wire Rope, Oakum, Pitch, Tar, Paints, Oils, etc.

Complete Outfits of Sails, Rigging, etc., for Vessels and Steamers, furnished on short notice and at as low prices as any one on the Lakes.

Ft. of Washington St., BUFFALO, N. Y.

GEO. O. FINNEY. JAS. CHANNON

Finney AND Channon,

Ship Chandlers & Sail Makers,

Manila, Hemp and Wire Rigging.

Blocks, Anchors, Chains, Paints, Oils, etc.

Special Attention Given to Out-fits and Repairs.

270 and 272 South Water St.,

CHICAGO, - - ILLINOIS.

J. W. GROVER & SON,

SHIP CHANDLERS

SAIL MAKERS AND RIGGERS,

IMPORTERS AND WHOLESALE DEALERS IN

Wire Rope, Manila and Tarred Cordage, Canvas, Blocks, Oakum, Tar, Pitch, Oars. Anchors, Chains, etc.

117 & 119 RIVER ST., & 134 & 135 DOCK, CLEVELAND, OHIO.

H. L. SHAW,

EAST SAGINAW, - - - MICH.,

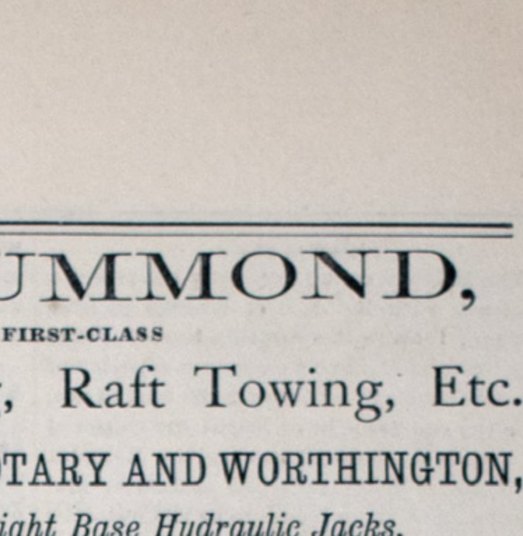
VESSEL BROKER, AGENT AND OWNER

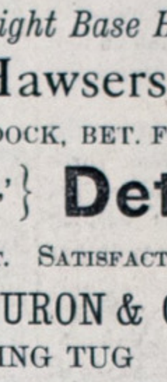
Special attention given to charters for the LUMBER COAL AND STONE TRADE.

Vessel property and machinery bought, sold and exchanged. If you have anything to sell or want to buy write me; no commission unless sale is made.

MARINE COLLECTIONS PROMPTLY ATTENDED TO.

Tugs and Lightersalways on hand. Correspondence solicted.





Cleveland Block Co.,

MANUFACTURERS OF

Iron Tackle Blocks

TAKING THE PLACE OF WOODEN BLOCKS FOR ALL PURPOSES.

159 River St., CLEVELAND, O.

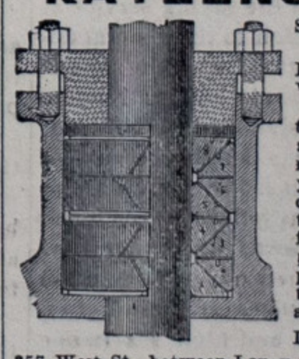
ROPE NETTING

For Steamers and Steam Yachts a Specialty.

E. A. EVANS, Rigger,

193 South St., New York.

KATZENSTEIN'S



SELF-ACTING METAL PACKING

FOR PISTON RODS, VALVE STEMS, Etc.

Adopted and in use by the principal Iron Works and Steamship Companies within the last eight years in this and Foreign countries. Also flexible tubular metallic packing for slip-joints on steam pipes and for hydraulic pressure. For full particulars and references address

L. KATZENSTEIN & CO

357 West St., between Leroy and Clarkson-st, N. Y.

CAPT. THOS. WILSON, who uses this packing on his Steamers, and THE MARINE RECORD are Agents for Cleveland and the Lakes.

McKINNON BROS.

Ashtabula Harbor, O.,

Machinists, Shipsmiths & Steamfitters;

ALSO, DEALERS IN

Engineers' Supplies, Lubricating and Burning Oils.

BUSINESS PROMPTLY ATTENDED TO.

A. H. MILLS'

Harbor and River Tug Line

Detroit, Mich.

Office No. 8, Foot of Woodward Ave., on the Dock.

Telephone No. 508.

Tugs Shoo Fly, Dave and Mose.

Steam Pumps and Divers on Short Notice.

HARBOR TUG MOLLIE SPENCER.

ENGINE, 20 by 24, Port Huron, Mich. For light wrecking this tug has the most complete outfit on the lakes. Supplied with steam ejectors, capacity of 32,000 gallons per minute, hawsers, steam pumps, diving rigs, blocks etc., just the outfit for waterlogged and sunken boats, at cheap rates. River and harbor towing. Telephone, telegraph,

LYNN'S TUG OFFICE.

TUG FOR SALE.

Length over all, 52 feet; beam, 13 feet; depth of hold, 5 feet 8 inches; net tonnage, 7.38. Engine, 10x12; upright steel boiler. One year old, and in first-class order. Address,

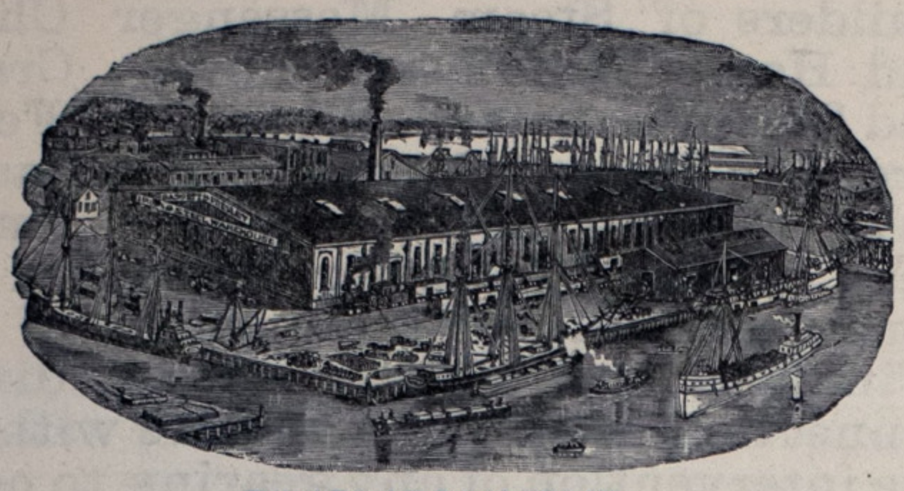
JAS. LAIRD, Ashtabula Harbor, O.

IRA B. BASSETT. GEORGE PRESLEY, Jr.

BASSETT & PRESLEY,

[Successors to W. H. McCurdy & Co.]

Office and Warehouse, cor. Elm & Hemlock Streets, Cleveland, O.



WHOLESALE DEALERS IN

BAR, BOILER HOOP ANGLE AND SHEET IRON.

Nails, Railroad and Boat Spikes, Boiler, Tank and Cooper Rivets, Swedes Iron, Boiler Tubes, Nail Rods, Etc., Etc., Etc.

We Represent in this Market the Following Well-known Manufacturers:

Andrews Bros. & Co. .....Youngstown, O.
BAR IRON AND POLISHED SHAFTING.

Reading Iron Works.....Philadelphia, Pa.
BOILER TUBES.

Central Iron Works.....Harrisburg, Pa.
BOILER PLATES.

Lindsay & McCutcheon,.....Pittsburg, Pa,
HOOP, BAND & STAR HORSESHOE IRON.

George W. Johnson,.....Newcastle, Pa.
TANK SHEET IRON.

Dilworth, Porter & Co., Limited..Pittsburg, Pa.
RAILROAD AND BOAT SPIKE.

Hoopes & Townsend,.....Philadelphia, Pa.
BOILER AND TANK RIVETS.

Sanderson Bros. Steel Co,.....Syracuse, N. Y.
CAST STEEL.

Joseph Corns & Sons ....Massillon, O.
CROWN STAY BOLT IRON.

Pencoyd Iron Works,.....Philadelphia, Pa.
ANGLE IRON.

A Complete Stock of all above Goods in Our Warehouse.

SAMUEL F. HODGE & CO.,

MANUFACTURERS OF

MARINE,

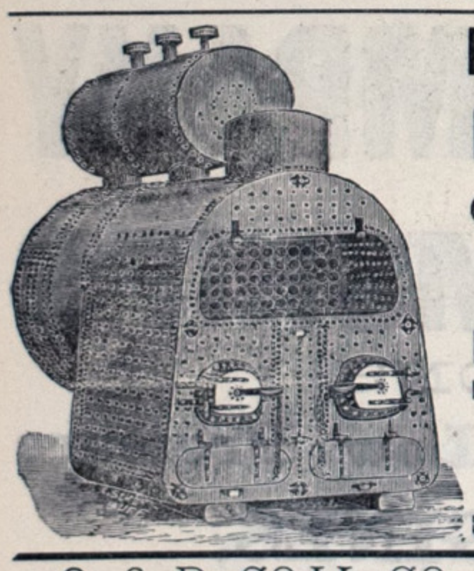
Stationary & Portable Engines,

MINING MACHINERY AND

PROPELLER WHEELS,

Riverside Iron Works, 314 to 326 Atwater Street,

DETROIT, MICH.



EAGLE BOILER WORKS,

M. RITER, Prop'r,

Cor. Indiana & Mary St.,

BUFFALO, N. Y.

MANUFACTURER OF

High and Low Pressure

Marine, Stationary, Portable, Locomotive and Upright Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.

REPAIRS PROMPTLY ATTENDED TO.

O. & P. COAL CO. & THOS. AXWORTHY.

FUEL DEPARTMENT.

PRESLEY, ARTHUR & CO., AG'TS.

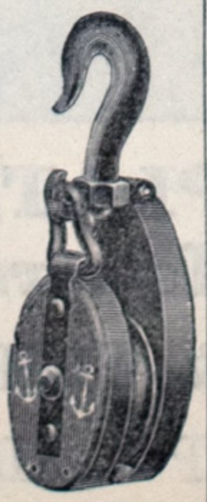
Steamboats, Tugs, etc, Coaled Day and Night.

DEALERS IN LACKAWANNA ANTHRACITE COAL.

Docks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier

OFFICE 130 RIVER-ST., CLEVELAND, OHIO.

Clasp Open. Clasp Closed.



LOCKPORT PATTERN,

Improved Snatch Block,

Ahead of All Others.

Reliable in every way; easiest to operate. Extra Wide Mortise. When bushed with our Celebrated Phosphor Bronze Self-Lubricating Bushing it's o.k Sample Orders Solicited.

Penfield Block Co.,

LOCKPORT, N. Y.

☞ H our new Cargo Hoisting Block? Also our Special W ought Iron Block for Wire Rope.

ST. MARY'S, OHIO. MONTPELIER, OHIO. } OAR MILLS. NEPTUNE ANCHOR WORKS

DEGRAUW, AYMAR & CO.,

MANUFACTURERS AND IMPORTERS OF

CORDAGE, OAKUM, WIRE ROPE,

CHAINS, ANCHORS, OARS, BLOCKS

COTTON AND FLAX DUCKS, FLAGS

BUNTINGS, RUSSIA BOLT ROPE,

MARINE HARDWARE AND SHIP-CHANDLERS' GOODS GENERALLY.

Nos. 34 AND 35 SOUTH STREET, NEW YORK.

A PUZZLE.

Which Man is the Tallest?

If you measure carefully the figures in above Cut you will find the man who appears the shortest is in reality the tallest. If you will coal your boat at my dock, adjoining S. F. Hodge Iron Works, you will get better dispatch and better COAL than at any other place in the city.

O. W. SHIPMAN,

OFFICE:

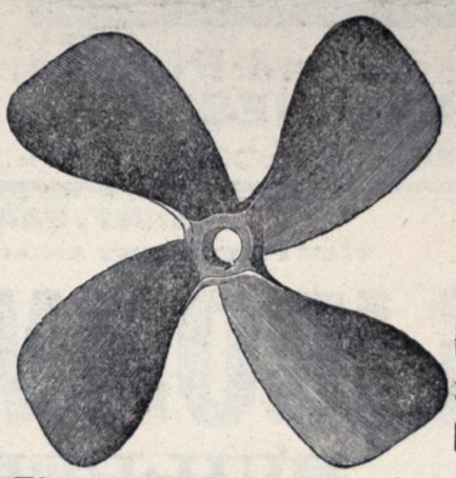
Cor. Griswold and Larned Sts.

H. G. TROUT,

KING IRON WORKS,

BUFFALO, N. Y.,

MANUFACTURER OF



Triple Expansion Marine Engines,
Three Cylinder and Fore and Aft and Steeple Compound Marine Engines,
High and Low Pressure Engines,
SECTIONAL PROPELLER WHEELS,
PROPELLER, TUG & YACHT WHEELS

These wheels are noted for their extra speed and towing power, or aproportionate saving of coal.

PRICES QUOTED ON APPLICATION.

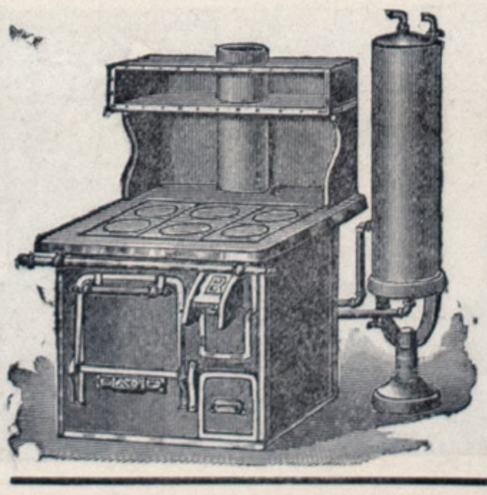
F. & H. BORN,

MANUFACTURERS OF

STEEL PLATE FRENCH RANGES

For Steamboats and Vessels,

Hotels, Restaurants and Private Families.



The Best Material Used

EVERY RANGE WARRANTED PERFFCT.

Adapted for Hard or Soft Coal, Coke or Wood.

Broiler and High Hot Closet and Steam Table Attached.

BORN'S STEEL PLATE FRENCH RANGES are now in use on many Vessels and Steamboats, the owners of which testify to their durability, economy of fuel, conveniance and elegance of finish.

F. & H. BORN,

128 Superior st., CLEVELAND, O.

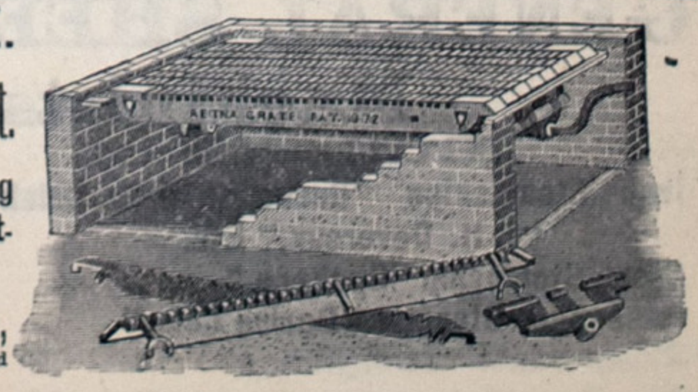
THE ÆTNA GRATE.

G. C. BARNES, Agt.

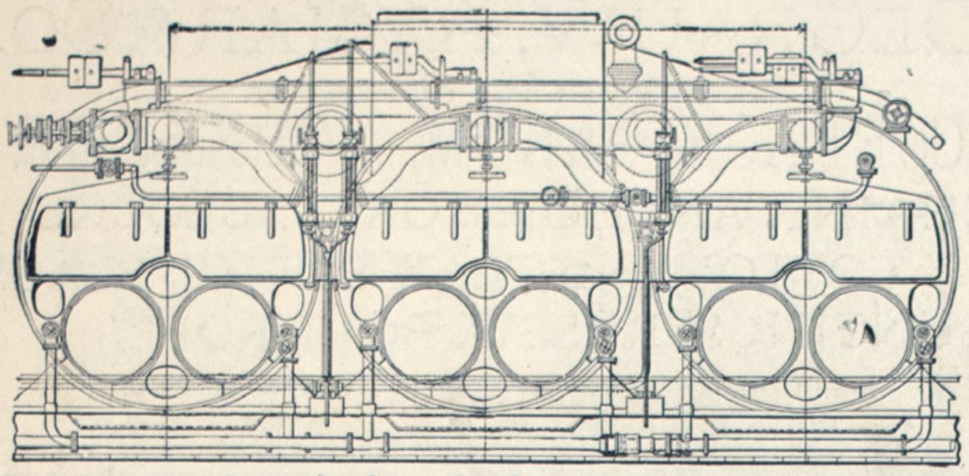
This Improved Shaking Grate Especially Adapted to Burning Slack.

Globe Iron Works, Manufac's.,

Office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.



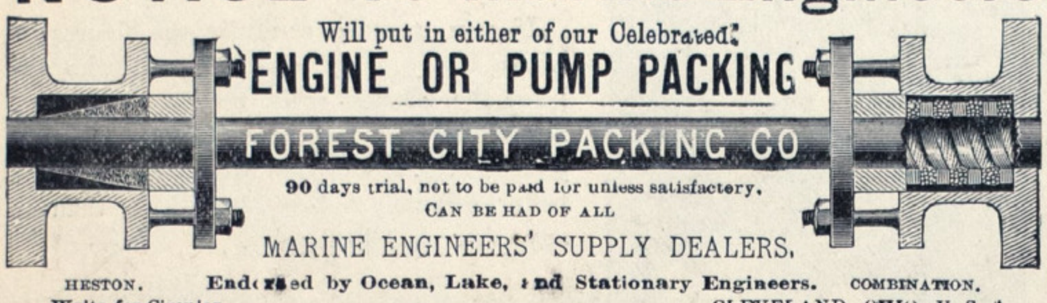
LAKE ERIE BOILER WORKS.



The best equipped plant in America for the manufacture of Modern Marine Boilers

BUFFALO, NEW YORK

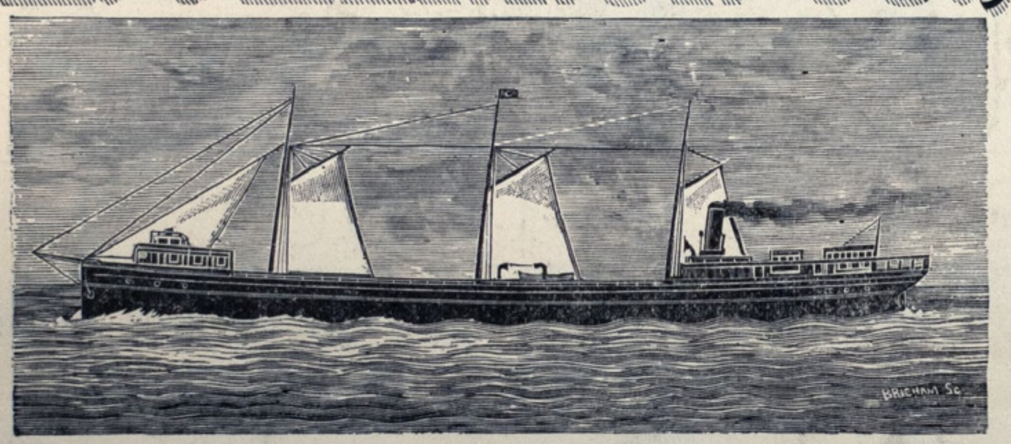
NOTICE--To Marine Engineers



90 days trial, not to be paid for unless satisfactory.
CAN BE HAD OF ALL
MARINE ENGINEERS' SUPPLY DEALERS.

HESTON. Endorsed by Ocean, Lake, and Stationary Engineers. COMBINATION.
Write for Circular. CLEVELAND, OHIO, U. S. A.

H. CHANNON CO.,



Ship Chandlers, Sail Makers and Riggers.
STEAM-BOAT SUPPLIES.
22 to 26 Market-St., near Randolph-St., Chicago, Ill's.

Established in 1857.

AMERICAN SHIP WINDLASS CO.,

Builders of Steam, Messenger Chain and Hand Windlasses, Power, Crank and Steam Capstans, Wharf and Ferry Drops. Their Capstan Windlasses have a Power Capstan with a single head which has power and speed arrangement entirely independent of the Windlass, and which makes a direct connection with the Windlass without the intervention of any gearing to complicate it and increase the friction.

In all their styles of Steam Windlasses they make a direct connection between the engines and the windlass without counter shafts or additional gearing. This saves friction and liability to break down, and conduces to durability and ease in operating. They also have a counterbalance for the engines and an automatic lubricator for worm and worm gear. and the engines are placed together in the most accessible position. The above improvements and others too numerous to mention, but which are familiar to Masters, Owners and Builders, are covered by Patents owned exclusively by this Company. For plans and information

Address,

FRANK S. MANTON, Agent. . O. box 53, Providence, R. I.

H. M. HANNA, PRESIDENT. JOHN F. PANKHURST, VICE PRESIDENT AND GENERAL MANAGER. LUTHER ALLEN, SECRETARY AND TREASURER

THE GLOBE IRON WORKS COMPANY

BUILDERS OF

IRON AND STEEL STEAMSHIPS

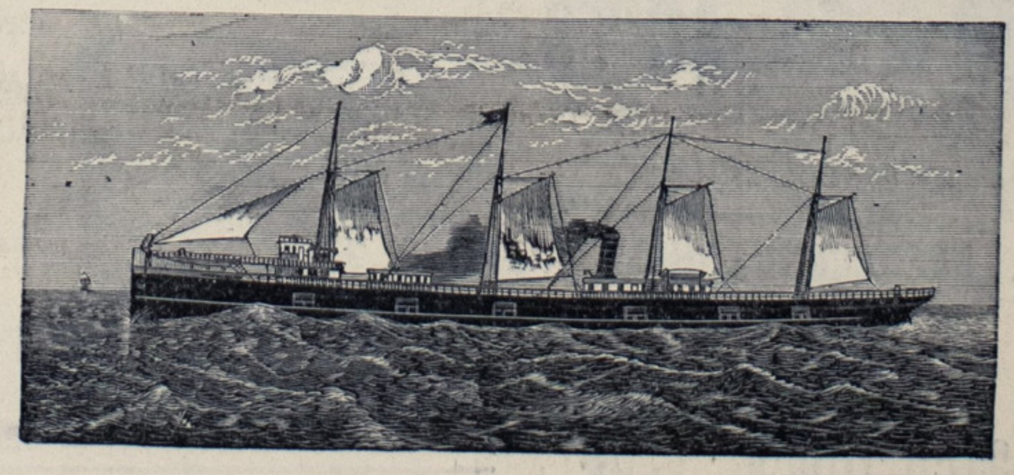
AND VESSELS OF ALL DIMENSIONS,

Triple Expansion, Compound, High Pressure and Low Pressure

MARINE AND STATIONARY ENGINES,

MARINE, STATIONARY & PORTABLE BOILERS.

Blast Furnace and Rolling Mill Machinery, Hoisting and Pumping Engines, Portable Hoisting Engines.



Steam Pumps, Steam and Hand Windlasses, Winches, and Marine Appliances of Every Description.

GENERAL SHEET AND PLATE IRON WORKERS,

Machinists, Boiler-Makers and Founders.

Builders of

Iron Steamships "Onoko," "Wm. Chisholm," "J. H. Devereux," Etc.
Steel Steamship "Spokane."
Passenger Steamer "Darius Cole."
Steam Yacht "Twilight."
Iron Tugs "International" and "Record."

OFFICE & WORKS, Spruce and Elm Streets.
IRON SHIP YARD, Old River Bed, foot of St. Paul St

CLEVELAND, OHIO.